System Configuration Team (SCT)

Reasonable & Prudent Measure #26
Meeting Notes
July 2, 1998

I. Greetings and Introductions.

The July 2 meeting of the System Configuration Team was held at the National Marine Fisheries Service's offices in Portland, Oregon. The meeting was co-chaired by Bill Hevlin of NMFS and Jim Ruff of the Northwest Power Planning Council staff. The agenda and a list of attendees for the July 2 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

II. FFDRWG and AFEP Updates.

Rebecca Kalamasz of COE Walla Walla provided a brief FFDRWG update, saying the last meeting of that group was on June 4. After a series of section updates, she said, there was an update on the surface collector; we then discussed the evaluation separator. Basically, at the time of the meeting, the support structures were complete; since the meeting, other components have been installed. The FFDRWG recommendation was to do some hydraulic testing once installation is complete; it was agreed to set up a FFDRWG subgroup to come up with a hydraulic testing plan. The plan is scheduled to be sent out for regional review on July 23; it will be discussed further at the next FFDRWG meeting, scheduled for August 13.
During the last FFDRWG meeting, the group also heard an update on the turbine program, including some discussion of release points, and the orientation of the fish exiting the turbines; there is some concern about injuries caused by the induction system. There was also some discussion of new information about the 1% operating curve, Kalamasz said; the upshot is that we are going to try to develop a new operating curve for incorporation into the Fish Passage Plan.

The next update FFDRWG heard was on the adult fishway auxiliary water supply, Kalamasz said; basically, the group feels it is very important to discuss the need for new criteria for the projects, and it was agreed to coordinate that effort through FPAC and FPOM. I believe there is an FPOM meeting to discuss that scheduled for today, said Ron Boyce of ODFW.

There was also some discussion of the detailed risk analysis, Kalamasz said; the engineers reported that it may not be possible to do quite as detailed an analysis as was originally thought, due to time and funding constraints.

COE's Tim Wick provided a report on preliminary results from the 1998 surface bypass and collection test at Lower Granite Dam; the Corps distributed Enclosure C, a document summarizing key hydroacoustic performance values for the 1997 and 1998 SBC tests at Lower Granite. Among Wick's key points: SBC efficiency was 72% over the full season, compared to 39% in 1997. 1998 fish guidance efficiency was 82%, compared to 87% in 1997. The other key number, said Wick, is the behavioral guidance structure (BGS) diversion coefficient of 58% in 1998 – this represents the percentage of fish that were headed toward units 1, 2 and 3, and were diverted north by the BGS. I have a preliminary analysis report that we just received from Battelle yesterday, Wick said; that will be going out in the mail today.

We are presently operating the surface collector for a summer test at Lower Granite, Wick continued; that test started yesterday, and will continue for approximately two weeks.

Rock Peters of the Corps informed the group that a special FFDRWG meeting has been scheduled for July 6 at COE's Portland District offices, to discuss gas abatement. He then distributed Enclosure D, the Portland District FFDRWG update from the June 2 FFDRWG meeting; it included the following issue for further SCT discussion:

B1 FGE Pier Nose 6' Extension test in 1999:
\ Need to discuss cost, objectives, biological benefits to meet schedule

\

Can we detect a biological difference between trashracks moved out 6' and current location?

\

Is it worthwhile to spend funds on this in 1999?

\

Need to award construction contract shortly (August?)

It was agreed to discuss this issue later in the agenda, under Agenda Item VI. Peters continued on through Enclosure D; please see this document for key issues identified and general updates presented at the June 2 FFDRWG meeting.

III. Gas Abatement at Grand Coulee.

At the SCT's recent Grand Coulee meeting, there was a request to the Bureau to provide an explanation of which Grand Coulee gas abatement alternatives have been designated for further study, and a written response to some of the comments provided by the SCT on the Bureau's alternatives selection process, said Hevlin. Enclosure E, a letter from USBR Regional Manager of Resource and Technical Services Darryl Beckmann to the SCT, dated June 15, is that
response.

Kathy Hacker spent a few minutes going through this letter, and the explanations provided by the Bureau. I have read the letter, said Boyce, and I think there are still a lot of

outstanding technical and policy issues with respect to how the Bureau has gone about evaluating alternatives. In particular, Oregon is concerned that none of the alternatives that are being carried forward into the next phase of study will meet the state and federal water quality standard, he said. However, it sounds, from this letter, as though the Bureau has made its decision about which alternatives will be carried forward for further study, based on their own technical assessments and economic concerns. In my view, said Boyce, abating gas is more of a regional issue, and I'm not very comfortable with the process that is currently in place to address gas abatement at Grand Coulee, and some of these outstanding issues.

The group discussed the potential to develop a systemwide analysis to address Grand Coulee gas abatement, similar in nature to the Corps' DGAS program. The only problem with that, said Monte McClendon of Reclamation, is that we have narrowed ourselves down to three alternatives. If one of the other alternatives fits into some sort of system-wide analysis, we wouldn't be sitting here. It could be, though, that after running a systemwide analysis, one of the options you've already eliminated might emerge as even more important, said Steve Rainey of NMFS.

Ruff said that, at the Grand Coulee meeting, it was mentioned that the Bureau had funding to designate six different alternatives for further study. However, you have only identified five alternatives for further study in your letter. In our basic assessment, we felt that these five were basically covering the possibilities we were looking at for investigation, Hacker replied. We have funding available to study six alternatives, but that doesn't necessarily mean we need to spend all that money.

However, there were a number of agencies that recommended further study of Alternative 7 – the widened river channel with baffled labyrinth weir and river gates, Ruff said. We recognize that that is a high-cost alternative, he said, but it is also the alternative that reduces gas the most, and gets us closest to the state water quality standard. If there is funding available, is it possible that Alternative 7 could also be included in this study? Because that would certainly help address some of Ron's concerns, said Ruff.

It certainly isn't reluctance on Reclamation's part to study alternatives that would get us close to the water quality standard, Hacker replied -- the concern is even trying to imagine what those structures would look like. There is also some concern about a lack of Bureau authority or responsibility to implement such an alternative. I don't think it would be productive for us to debate whether the purpose of this exercise is to reduce gas to the Clean Water Act standard, said Hevlin – mainly, we want to be sure that the range of alternatives studied includes some that can get us there, or at least get us close.

Basically, I would like to see a fuller range of alternatives studied, said Boyce; I would also like to some sort of process in which the gas abatement program at Grand Coulee is plugged into a systemwide analysis, and integrated with the Corps' ongoing DGAS program, as well as the transboundary discussions. I don't think it's appropriate for the Bureau to make these decisions in isolation, he said.

Where is the basinwide steering committee in its development of its system study? asked Witt Anderson of the Corps. At the most recent meeting of the steering committee, Ruff replied, we discussed what some of the goals might be for reducing dissolved gas systemwide; I think we

came up with a generic goal that we can all live with. At the end of the meeting, we agreed to break into subgroups to address various topics, including gas monitoring, information sharing, modeling and systemwide gas abatement. The latter group includes a broad spectrum of agency representation, and fully intends to include the Bureau and Grand Coulee in whatever systemwide assessment is developed, Ruff said. That assessment is expected to look at both short-term operational alternatives and longer-term structural alternatives, like the ones identified in the Bureau's letter, he added. To answer Witt's question directly, Ruff said, we are in the process of scheduling a conference call of the systemwide gas abatement subgroup, to begin scoping that work effort and to develop a schedule, work plan and cost estimate.

Rainey observed that it may be premature to ask the Bureau to move too quickly on developing its more detailed analyses of Grand Coulee gas abatement alternatives, given the need
to integrate Grand Coulee gas abatement with similar efforts at Chief Joseph and the other Mid-Columbia projects. Basically, we're interested in bringing everyone together and developing a systemwide approach, Ruff said.

Boyce reiterated that, in his view, a technical process, modeled after the Corps' DGAS program and involving all of the salmon managers and management agencies, needs to be developed to facilitate detailed biological and engineering discussion of the Grand Coulee gas abatement alternatives. Reclamation's Dave Zimmer replied that a group, including representatives from the Bureau, the Corps, WDOE and the Mid-Columbia PUDs has been formed to evaluate design flaws for gas abatement alternatives at the Mid-Columbia projects.

The group spent a few minutes discussing possible mechanisms for providing technical input, in a systemwide context, on the Grand Coulee gas abatement alternatives analysis. Ultimately, Ruff asked the Bureau to notify the SCT membership of any upcoming meetings to discuss structural alternatives for gas abatement at Grand Coulee; that way, anyone who is interested in attending can attend, he said. In the meantime, he added, I will continue to update the SCT on the activities of the transboundary group and the systemwide gas abatement subcommittee. At the same time, if the Corps has new information on the DGAS program, they can also bring that to SCT; the Bureau can also provide updates on the status of its Grand Coulee feasibility study. In other words, Ruff said, I think it would be possible to do what Ron is suggesting through the SCT, at least until a new forum is developed. My suggestion is that we continue to move forward, and it will evolve into something, said Ruff – until it does, let's use SCT.

I would still like to get some resolution on the specific alternatives the Bureau is planning to carry forward into the next phase of analysis, said Boyce. Is the Bureau's short list carved in stone, or is there still flexibility to add to the list – that's the question, said Hevlin. After some minutes of further discussion, Hevlin suggested that a special SCT technical meeting be scheduled, specifically to go through the Bureau's list of Grand Coulee structural alternatives and
the comments received to date, to allow for some further dialogue on the SCT's issues of concern. It was agreed that the Bureau will coordinate this meeting, to be held Thursday, July 30 at NMFS' Portland offices.

IV. Gas Abatement at Chief Joseph.

Kathy Hacker of COE led a discussion of the Corps' Chief Joseph Dam TDG abatement initial appraisal report, saying that, to date, she has received comments on the report internally from the Corps, from NMFS, from the Dissolved Gas Team and from the State of Washington; in addition, some comments have been received indirectly from BPA, via a letter sent to Mark Schneider. Bob Heinith said CRITFC is very supportive of the Corps installing flow deflectors at Chief Joseph; in fact, we would like to see that effort funded in FY'99, he said.

In general, said Hacker, the comments received from the Corps have been focused on the details of the report; most have now been incorporated into the final draft. The DGT comments focused more on the final report, Hacker said; the DGT felt that the flow deflectors identified in the final report need to be redesigned, to incorporate more of a curved transition to horizontal flow. We are strongly considering a new model study to look at that further, she said. The DGT also suggested further investigation of the current degassing at Rooster Flats, to better determine how effective our proposed degassing could be, she said; that will be examined in the near-field study scheduled for FY'99. Others felt that degassing at Rooster Flats is too far downstream to be considered degassing at Chief Joseph, Hacker added.

Other commentors felt that we may have overestimated the magnitude of the reduction in TDG we could achieve with flow deflectors at Chief Joseph, Hacker continued; they felt that 115%-120% is probably more realistic than 110%-112%. NMFS commented that we should more thoroughly investigate a possible system fix before we proceed with structural changes at the project, she said (a copy of the NMFS comments is attached as Enclosure F; please see this document for more details). From BPA, we heard the comment that the remaining potentially prominent hot spot in the Upper Columbia is around Chief Joseph; BPA felt that the installation of flip-lips at Chief Joseph would improve the ability to manage dissolved gas on a systemwide basis. BPA feels this is the only action justified for implementation in the near-term, Hacker said; essentially, they support fast-tracking flow deflectors at Chief Joseph.

In explanation of the NMFS position, Rainey said there are some years when no spill occurs at Chief Joseph; NMFS feels that it may be prudent to investigate whether it may be possible to transfer some of the spill at Chief Joseph to other projects before taking the step of installing Chief Joseph flow deflectors. We don't want to go off half-cocked, in other words, he said. BPA's Phil Thor made the point that, while it is true that spill does not occur every year at Chief Joseph, if flow deflectors were installed at that project, we may want to spill every year at Chief Joseph in order to reduce spill somewhere else in the system. Good point, said Rainey.

Basically, flow deflectors give us immediate results at a much lower cost than some other measures, and would greatly improve system flexibility, said Heinith – that's the CRITFC position. In addition, said Marion Valentine of the Corps, there is a strong desire to keep flows as constant as possible in the Hanford Reach. If you really want to keep those flows constant, without major fluctuations, then you need to be able to spill at Chief Joseph.

In response to a question, it was observed that, if this project is given the green light, it may be possible to install flow deflectors at Chief Joseph within 3-5 years. The key to that is the WES modeling work using the latest design the DGAS Team has been discussing with us recently, said Anderson – that will give us the physical design, as well as a detailed cost estimate. Basically, we're trying to leave our options open, in case the region decides that they want to move quickly on Chief Joseph flow deflectors, Anderson said.

Hacker said the plan of study for this project will be available for review by the end of July, with all work on the plan of study completed by late September. If we can find the funding for this in FY'99, Anderson said, we'll be able to move quickly to get the technical work started. He added that this project is not a part of the CRFM program, but would be paid for using Corps O&M funds. Will the studies now planned for FY'99 get us to the point that we can begin construction in FY'00? Heinith asked. Probably not, Hacker replied – the $300,000 we've requested for this project in FY'99 will cover the model study and near-field testing work; we would then need to do the actual design work in 2000, with construction getting underway in 2001. In response to a question, Hacker said roughly $150,000 would be needed for the actual design work, but added that it probably will not be possible for the Corps to complete the design work on this project before the model study results are in.

After a few minutes of further discussion, Ruff suggested that the SCT wait until the Corps' plan of study is complete at the end of this month before discussing this project in more detail. It was so agreed.

V. Discussion of Council Issue Paper on Independent Engineering Review of COE Mainstem Capital Construction Program.

Ruff said that comments on this issue paper are due by July 24; to date, the Council has received no comments from anyone. We do expect to get some before the comment period is over, he said; there will also be an opportunity to provide verbal comments at the Council work session in Portland on July 22. The Corps has indicated that they would like to take that opportunity to discuss the paper with the full Council, Ruff said; if any other parties would like to be on the July 22 agenda, please let me know as soon as possible – certainly by the end of next week.

The discussion turned to the agenda for the July 15 ISAB meeting, which will begin Phase II of the independent engineering review. Ruff reported that, in the morning, three hours have been set aside for a briefing on preliminary results from the 1998 surface bypass prototype testing at Lower Granite, Bonneville, Rocky Reach, and, possibly, Rock Island. The second part of the ISAB agenda, covering the remainder of the day, will be taken up by the Corps' Gas Abatement Program, Ruff said. This briefing will include a summary of the available gas bubble trauma research in the basin, the state water quality agency perspective, an overview of the Dissolved Gas Abatement Program, engineering analysis of the alternatives, physical data collection, the biological research and modeling approach, a summary/wrap-up and a period for questions and discussion. In other words, it's going to be a long day, said Ruff.

Do NMFS and CRITFC want specific time allocated for them on this agenda? Ruff asked. Yes, replied both Hevlin and Heinith. I'll give you 20 minutes apiece, Ruff said. In response to a question, he added that the meeting will be held in the Council's Portland offices; anyone with an interest in the proceedings is invited to attend.

VI. Pier Nose Extensions for Bonneville PH1 FGE Testing in 1999.

My understanding is that we need to make a decision about whether or not these pier nose extensions are needed for FGE testing in FY'99, because the Corps needs to let the construction contract for this project later this month, Hevlin said. Actually, we're scheduled to advertise the

contract for the pier nose extensions in the first week of August, with award in mid-September, said Doug Clarke of COE. At FFDRWG, there has been a question raised about our ability to evaluate these pier nose extensions, Clarke said; the basic idea, as most of you are aware, is to evaluate whether this six-foot extension will increase guidance, with extended-length screens, at Bonneville PH1. Clarke distributed Enclosure G, a brief overview of the proposed project and a diagram showing the physical changes it would entail.

Clarke went through some of the results from the hydraulic model studies for this project, biological expectations and issues, the construction schedule, cost and ESBS design issues. Basically, we're operating under a very tight timeline if we are to construct these extensions in FY'99, he said; however, we think we can meet that schedule, if the contract is awarded in September. The cost, in FY'99, will be $2.5 million to $3.5 million.

The SCT discussed this project for some minutes; no clear consensus emerged. Peters said this project will be discussed further at a FFDRWG meeting on July 7 and an SRWG meeting on July 20; it was agreed to convene an SCT conference call to make a final SCT recommendation on this project on Tuesday, July 28.

VII. John Day E-Screens Update.

COE's John Kranda reported that the John Day extended-length screen prototype was removed from the water on June 26 because a cable was cut; as a result, the 1998 testing program
is finished for the year. At the August SCT meeting, we plan to come in with some alternative proposals for going forward with E-screen prototype testing, Kranda said, including modifying the prototype and re-testing in 1999.

Hevlin distributed Enclosures H, I and J, incorporating comments from NMFS, the Corps, CRITFC, ODFW and BPA on the ISAB's Phase I report. Ruff also distributed Enclosure K, the letter the Council is sending along with the Phase I report to Congress. The take-home message is on Page 2, said Ruff – that the contracting for the installation of 18 extended-length screens at John Day in FY'99 should be deferred indefinitely. At Bonneville, the Council is recommending that work proceed on the outfall relocation project, as well as on the study of all the various bypass alternatives, as an integrated package, to compare the different alternatives, from DGAS to surface bypass to FGE improvements.

In response to a question, Ruff added that all of the comment letters referenced above will be attached to the Phase I report.

VIII. Introduction to the Near Term/Long Term D-Gas Proposal.

COE's Steve Bredthauer provided a brief overview of this proposal, explaining that the Corps has proposed to move forward with those gas abatement alternatives that have a minimum degree of fish safety uncertainty, are relatively inexpensive, and have specific gas abatement benefits that can be provided through deflector optimization at each project. Essentially, he said, the results at Ice Harbor and John Day exceeded expectations; there is some sense that there is enough evolution of understanding through the DGAS work of the deflector gas abatement technology that there is real potential for gaining incremental benefits in juvenile survival by being able to spill more while producing less dissolved gas. This work can potentially be funded

through CRFM dollars; we have already funded deflector installation at John Day and Ice Harbor. Basically, he said, what is being proposed is a 3-5 year investigation of each project, to identify 7-8 alternatives for improvement of deflector technology; if implemented, these alternatives should result in incremental dissolved gas benefits at each location.

A DGAS/FFDRWG meeting has been scheduled for Monday, to discuss this proposal further, Bredthauer said. We wanted to get it on the agenda, he said, because what we're proposing is that, by pulling the deflector improvements out of the DGAS program, we will be getting a two-year head start. We would like to get on with this work, he said, and try to implement these improvements within the next five years.

In terms of the line-item list for FY'99, said Hevlin, what this does is break out the scoping of these near-term items. We don't really have a feel for what that will entail at this time, in terms of what would need to be funded in FY'99. Our intent was to get this in front of the SCT early enough so that there may still be time to get it on your radar screen for funding in 1999, said Bredthauer. In response to a question, Rock Peters said that, from the Corps perspective, it may be premature to take this step prior to the completion of the systemwide analysis on the eight mainstem projects. The broader systemwide analysis, including the Upper and Mid-Columbia projects, also needs to be taken into account, he said. I'm assuming that these are the kinds of discussions we'll be having at the meeting on Monday, he added.

IX. Prioritization of FY'99 CRFM Program Items.

Ruff updated the SCT on the current status of the FY'99 CRFM budget negotiations in Washington D.C., saying that the current Senate bill includes $95 million for the CRFM program, while the House has recommended only $7.7 million in FY'99 CRFM funding. Basically all that's in the House side is funding for the Lower Snake Feasibility Study and the John Day drawdown study, said Ruff, together with some extremely pointed language about the CRFM program, to the effect that we had better get our act together, or we won't be receiving any further funding. Basically, the House language says there is no clear evidence that the salmon recovery efforts in the Northwest are or will become successful, Ruff said. It goes on to say that the decision on fish recovery options in the Lower Snake River expected in 1999 may have dramatic impacts on measures currently being pursued; accordingly, the Committee has recommended $3.7 million to continue John Day drawdown studies, and $4 million to consider the Lower Snake Feasibility Study.

The group spent a few minutes discussing some of the behind-the-scenes negotiations regarding the FY'99 CRFM budget ongoing at the Congressional level; Anderson encouraged anyone who wants to provide input to their Congressional representative to do so as soon as possible, because this bill is set to go into conference during the last two weeks in July. On the positive side of the ledger, said Anderson, both the House and the Senate language includes funding for the John Day drawdown study in FY'99, so we should be able to begin Phase I of that study next year.

Moving on, Hevlin drew the SCT's attention to Enclosures L and M – summaries of the results from the SCT's ranking exercise for the criteria and for individual study items and implementation items included in the FY'99 CRFM program. Touching first on the Implementation Items summary (Enclosure M), Hevlin explained that the first six pages of this

document show the actual scores received from ODFW, WDFW, BPA, NWPPC, NMFS and COE. Page 8 of this document shows the composite scores awarded by these six agencies to each implementation item; the rankings were as follows:

IMPLEMENTATION ITEM	SCORE
1. Bonneville PH2 DSM, monitoring and outfall relocation:	413
2. Bonneville PH1 DSM, monitoring and outfall relocation	391
1. McNary extended-length screens	371
1. System – adult passage improvements Lower Columbia	359
1. Lower Granite extended-length screens	354
1. Little Goose extended-length screens	349
1. The Dalles emergency auxiliary water supply	338
1. Ice Harbor flow deflectors	333
1. John Day flow deflectors (spill bays 1 & 20)	324
1. John Day monitoring facility	299
1.	

Lower Granite juvenile bypass facility 250
1.

McNary fish ladder modifications 211
1.

John Day extended-length screens 206

The composite rankings for the FY'99 study items laid out as follows:

STUDY ITEM	SCORE
1. The Dalles spillway and sluiceway survival study	405
2.	
System – Lower Snake River Feasibility Study	361
1.	
Bonneville adult feedback	359
1.	
Bonneville PH1 FGE	353
1.	
System – gas abatement study	335
1.	
Bonneville surface bypass	332
1.	
The Dalles surface bypass	324
1.	

John Day surface bypass 321
1.

Bonneville PH2 FGE 317
1.

Lower Granite surface bypass program 303
1.

System – turbine passage survival 276
1.

John Day drawdown study 270
1.

System – separator evaluation 269
1.

System – auxiliary water supply in ladders in Snake River dams 265
1.

Bonneville flat-plate PIT-tag detector 264
1.

Bonneville PH2 gatewell debris cleaning 249
1.

System – fish ladder temperature control evaluations 230
1.

System – Lower Granite turbine model study 229
1.

John Day relocation evaluation (Ringold) 220
1.

System – acoustic technology 153
1.

System – test flume at John Day 148

What we wanted to do, besides handing out these composite scores, was to begin discussing some of the issues that may be raised as a result of this ranking process, said Ruff. The group spent the rest of the meeting discussing these rankings, offering various suggestions and comments. Thor suggested that it may be helpful to combine the two lists into a single series of rankings; he also asked whether it would be possible to include FY'99 funding amounts in the

combined list. Good suggestion, said Ruff.

I would like to have some discussion about whether people agree or disagree with where specific projects fall out in these rankings, said Hevlin, particularly those that have fallen to the bottom of these lists. Those are the ones that are going to be axed, given the realities of our funding situation, so we should see if anyone has problems with some of these specific rankings.

Heinith suggested that the SCT should submit its criteria for review by the ISAB, given the importance of the decisions it will inform. One thing that isn't included in these criteria at all is maintenance of species diversity, and not selecting against weaker stocks and weaker species, he said. That seems critical, in light of the most recent report from the ISAB, Heinith said.

I think the intent of this prioritization exercise is to get everybody's input on what to do in FY'99 and beyond, said Hevlin. We started this process five months ago, and asked everyone to give input on the criteria we would use in this process. We started this with the criteria the SCT developed two years ago, then changed them, based on everyone's comments. We then went through the exercise of weighting those criteria, relative to one another. The bottom line is, this is the accumulation of five month's work, Hevlin said. If you have other criteria that you would like to apply, I think it makes sense for you to develop your own rankings, then see how the results of that exercise mesh with what the SCT has come up with. I think everyone understands that this ranking process is just a preliminary tool, to see how each agencies' ranking stack up against one another – now the process of discovering where disagreement lies, and how to resolve those differences, begins. I don't want to re-do everything the SCT has done so far, he said, but I would like CRITFC's input on the ranking of the projects.

Anderson observed that there is approximately $30 million in items that have to be funded before anything else in FY'99. For starters, he said, we borrowed $5.8 million – we reprogrammed other construction projects into this fiscal year – the Bonneville outfall, the Lower Granite surface collector, the feasibility study. In addition, said Anderson, there is the Ice Harbor
flow deflectors, end bays and navigation cells – $3.9 million; there is $19.2 million for the Bonneville PH2 outfalls; there is up to $3.5 million for the pier nose extensions, a decision that has yet to be made. Other decisions that need to be made for award this year include the completion work on the John Day smolt monitoring facility ($1 million); Lower Columbia adult measures ($750,000); gas abatement numerical model development ($450.000). If you take those as a package, said Anderson, that's nearly $35 million in continuing, high-priority items, although about $5 million of that is decisions that have yet to be made.

After some minutes of further discussion, it was agreed that the majority of the SCT's August meeting will be devoted to a discussion of FY'99 priorities. It was further agreed that it may be necessary to extend the SCT's September meeting to two days, in order to complete this task. Hevlin asked CRITFC and Idaho to submit their rankings prior to the SCT's August meeting, so that their input can be included in the SCT's deliberations.

X. Next SCT Meeting Date and Agenda Items.

The next meeting of the System Configuration Team was set for Friday, August 14. The SCT's September meeting date was set for Wednesday, the 16th. Meeting notes prepared by Jeff

Kuechle, BPA contractor.